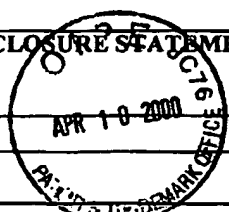


|   |   |                                      |
|---|---|--------------------------------------|
| FORM PTO-1449<br>U.S. Department of Commerce Patent and<br>Trademark Office | Docket No.<br><b>AURO1330</b>           | Serial No.:<br><b>09/498,098</b>     |
|   | Applicant(s): <b>Stack et al.</b>       |                                      |
| INFORMATION DISCLOSURE STATEMENT<br>BY APPLICANT                            | Filing Date:<br><b>February 4, 2000</b> | Group Art Unit:<br><b>Unassigned</b> |



U.S. PATENT DOCUMENTS

| *EXAMINER<br>INITIAL  |  | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE |
|---|--|-----------------|------|------|-------|----------|-------------|
| JAS<br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br> |  |                 |      |      |       |          |             |

EXAMINER *John C. Angell* DATE CONSIDERED *9/4/01*

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609: Draw line through citation if not in conformance and not considered. Include a copy of this form with the next communication to applicant.

FORM PTO-1449

U.S. Department of Commerce Patent and  
Trademark Office

Docket No.

AURO1330

Serial No.:

09/498,098

Applicant(s): Stack et al.

INFORMATION DISCLOSURE STATEMENT  
BY APPLICANT

Filing Date:

February 4, 2000

Group Art Unit:

Unassigned

## FOREIGN PATENT DOCUMENTS

| *EXAMINER<br>INITIAL |    | DOCUMENT NUMBER | DATE    | COUNTRY | CLASS | SUBCLASS | TRANSLATION |    |
|----------------------|----|-----------------|---------|---------|-------|----------|-------------|----|
|                      |    |                 |         |         |       |          | YES         | NO |
| 9/10                 | F1 | EP 479912       | 6/27/90 |         |       |          |             |    |
| 9/10                 | F2 | WO9947640       | 9/23/99 |         |       |          |             |    |
|                      | F3 |                 |         |         |       |          |             |    |
|                      | F4 |                 |         |         |       |          |             |    |
|                      | F5 |                 |         |         |       |          |             |    |
|                      | F6 |                 |         |         |       |          |             |    |
|                      | F7 |                 |         |         |       |          |             |    |

## OTHER PUBLICATIONS (including Author, Title, Date, Pertinent Pages, Etc.)

|      |    |  |
|------|----|--|
| 9/10 | D1 | Bachmair et al., In Vivo half-life of a Protein is a Function of Its Amino-Terminal Residue, <u>Science</u> 234, pp. 179-186, (1986).  |
| 9/10 | D2 | Bachmair et al., The Degradation Signal in a short-lived Protein, <u>Cell</u> 56, pp. 1019-1032, (1989)  |
| 9/10 | D3 | Butt et al., Ubiquitin-Metallothionein Fusion Protein Expression in Yeast, <u>The Journal of Biological Chemistry</u> 263, pp. 16364-16371, (1988)   |
| 9/10 | D4 | Ciechanover et al., The Ubiquitin-Mediated Proteolytic Pathway and the Mechanism of Energy-Dependent Intracellular Protein Degradation, <u>Journal of Cellular Biochemistry</u> 24, pp. 27-53 (1984) |
| 9/10 | D5 | Ciechanover, The ubiquitin-proteasome pathway: on protein death and cell life, <u>The EMBO Journal</u> 17, pp. 7151-7160, (1998).  |
| 9/10 | D6 | Fiering et al., Improved FAC-Gal: Flow Cytometric Analysis and Sorting of Viable Eukaryotic Cells Expressing Reporter Gene Constructs, <u>Cytometry</u> 12, pp. 291-301, (1991)                      |
| 9/10 | D7 | Finley et al., The Ubiquitin System: functions and mechanisms, <u>TIBS</u> , pp. 343-347, (1985)   |
| 9/10 | D8 | Gonda et al., Universality and Structure of the N-end Rule, <u>The Journal of Biological Chemistry</u> 264, pp. 16700-16712, (1989).   |
| 9/10 | D9 | Hershko et al., The Ubiquitin System, <u>Annual Review of Biochemistry</u> 67, pp. 425-479, (1998)   |

EXAMINER

DATE CONSIDERED

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609: Draw line through citation if not in conformance and not considered. Include a copy of this form with the next communication to applicant.

APR 10 2000

Docket No.

AURO1330

Serial No.:

09/498,098

Applicant(s): Stack et al.

INFORMATION DISCLOSURE STATEMENT  
BY APPLICANT

Filing Date:

February 4, 2000

Group Art Unit:

Unassigned

|      |     |  |
|------|-----|--|
| 9/18 | D10 | Hochstrasser, Ubiquitin-Dependent Protein Degradation, <u>Annual Review of Genetics</u> 30, pp. 405-439, (1996)  |
|      | D11 | Johnson et al., Proteolytic Pathway that Recognizes Ubiquitin as a Degradation Signal, <u>The Journal of Biological Chemistry</u> 270, pp. 17442-17456, 91995)   |
|      | D12 | Johnson et al., Ubiquitin as a Degradation Signal, <u>The EMBO Journal</u> 11, pp. 497-505, (1992)   |
|      | D13 | Jonnalagadda et al., Multiple Protein Endoproteases in Cells, <u>The Journal of Biological Chemistry</u> , 264, pp. 10637-10642, (1989).   |
|      | D14 | Koepp et al., How the Cyclin Became a Cyclin: Regulated Proteolysis in the Cell Cycle, <u>Cell</u> 97, pp. 431-434, (1999).  |
|      | D15 | Laney et al., Substrate Targeting in the Ubiquitin System, <u>Cell</u> 97, pp. 427-430, (1999).  |
|      | D16 | Lawler, et al., Viral Protease Assay Based on GAL4 Inactivation Is Applicable to High-Throughput Screening in Mammalian Cells, <u>Analytical Biochemistry</u> 269, pp.133-138, (1999).   |
|      | D17 | Lee et al., Proteasome inhibitors: valuable new tools for cell biologists, <u>Cell Biology</u> 8, pp. 397-403, (1998).   |
|      | D18 | Li et al., Generation of Destabilized Green Fluorescent Protein as a Transcription Reporter, <u>The Journal of Biological Chemistry</u> 272, pp. 34970-34975, (1998).  |
|      | D19 | Marcotte et al., Detecting Protein Function and Protein-Protein Interactions from Genome Sequences, <u>Science</u> 285, pp. 751-753 (1999).  |
|      | D20 | Ozkaynak et al., The yeast ubiquitin gene: head-to-tail repeats encoding a polyubiquitin precursor protein, <u>Nature</u> 312, pp. 663-666, (1984)   |
|      | D21 | Thompson et al., Modulation of Firefly Luciferase Stability and Impact on Studies of Gene Regulation, <u>Gene</u> 103, pp: 171-177, (1991).  |
|      | D22 | Thrower et al., Recognition of the Polyubiquitin Proteolytic Signal, <u>The EMBO Journal</u> 19, pp. 94-102, (2000).   |
|      | D23 | Varshavsky, The N-end Rule, <u>Cell</u> 69, pp. 725-735, (1992).   |
|      | D24 | Varshavsky, The N-End: Functions, Mysteries, Uses, <u>Proc. Natl. Acad. Sci. USA</u> 93, pp. 12142-1214, (1996).   |
|      | D25 | Varshavsky, The Ubiquitin System, <u>TIBS</u> 22, pp. 383-387, (1997).   |
| 9/18 | D26 | Worley et al., Engineering in vivo instability of firefly luciferase and Escherichia coli Beta-glucuronidase in higher plants using recognition elements from the ubiquitin pathway, <u>Plant Molecular Biology</u> 37, pp. 337-347, (1998). |
|      | D27 |  |
|      | D28 |  |

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609: Draw line through citation if not in conformance and not considered. Include a copy of this form with the next communication to applicant.